UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the drawings, Sheet 5, the word "our" in the title should be corrected to read "of".

In Claim 1, column 20, after line 43 please insert the missing page 2 of the submitted clean version of the Claims, which reads as follows:

"for evaluating said a-posteriori probability $p(s' | y(j<k))$ in equations (14) using $p(s|s' ,y(k))$ as the state transition a-posteriori probability of the trellis transition path $s'{\rightarrow}s$ to the new state s at k from the previous state s' at k-1 and given the observed symbol y(k) to update these recursions for the assumed value of the user data bits d(k) equivalent to the transmitted symbol x(k) which is the modulated symbol corresponding to d(k),

using a turbo decoding backward recursion equation

$$p(s' | y(j>k-1)) = \Sigma_{all\ s}\ p(s|y(j>k))p(s' | s,y(k))$$

for evaluating the a-posteriori probability $p(s|y(j>k))$ in equations (15) using said $p(s' | s,y(k)) = p(s|s',y(k))$ as the state transition a-posteriori probability of the trellis transition path $s{\rightarrow}s'$ to the new state s' at k-1 from the previous state s at k and given said observed symbol y(k) to update these recursions for said assumed value of d(k), evaluating the natural logarithm of the state transition posteriori probability $p(s|s',y(k))=p(s' | s,y)k))$ equal to a new decisioning metric DX in equations (11), (16), defined by equation

$$\ln[p(s|s' ,y(k)) = \ln[p(s' | s,y(k))]$$
$$=Re[y(k)x*(k)]/\sigma^2 - |x(k)|^2/2\sigma^2 + \underline{p}(d(k))$$
$$= DX$$

wherein $\underline{p}$ is the natural logarithm ln of p, x* is the complex conjugate of x, and ln [o] is the natural logarithm of [o],

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PATENT NO.   : 7,337,383 B1
APPLICATION NO. : 10/772597
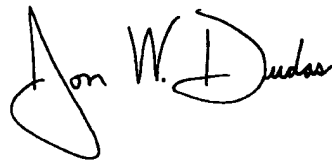DATED   : February 26, 2008
INVENTOR(S) : Urbain Alfred von der Embse

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

whereby said new state transition probabilities in said MAP
   equations use said DX linear in y(k) in place of the
   current use of the maximum likelihood decisioning metric"

Signed and Sealed this

Twenty-second Day of July, 2008

JON W. DUDAS
Director of the United States Patent and Trademark Office